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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,969	12/27/2001	Azusa Iwai	YOK-101	1793
24956	7590	12/23/2004	EXAMINER	
MATTINGLY, STANGER & MALUR, P.C. 1800 DIAGONAL ROAD SUITE 370 ALEXANDRIA, VA 22314			SINGH, SATWANT K	
			ART UNIT	PAPER NUMBER
			2626	

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/026,969

Applicant(s)

IWAI, AZUSA

Examiner

Satwant K. Singh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 4, 5, 8, and 9 rejected under 35 U.S.C. 102(e) as being anticipated by Mori et al. (6,433,882).
3. Regarding Claim 1, Mori et al disclose a medium having a print-control program to acquire print data, create intermediate files of the print data, read the files into a memory, convert the files, and thereby create actual-data-for-printing, said program comprising: a print data acquisition step to acquire print data (print data which the CPU 101 prepares through executing the application program) (col. 5, lines 61-63); an intermediate file creation step to divide the acquired print data into parts while keeping the file size of each parts within certain bounds and thereby create a plurality of intermediate files (the spool processor produces one or more new intermediate files (new EMFs) bases on the original intermediate files (EMFs) and the contents of the process information) (col. 6, lines 43-46); and an actual-data-for-printing creation step to read the created intermediate files into the memory for pre-determined conversions (application 11 transfers the

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print data to the printer drivers 12) (col. 7., lines 20-25), and thereby create actual-data-for-printing.

4. Regarding Claim 2, Mori et al disclose a medium having a print-control program, further comprising a bounds-to-file-size setting step to set the bounds to file size based on a user-preference setting (application 11 is for preparing print data (document data), for a single print job, according to a user's instruction inputted to the input device 110) (col. 7, lines 20-25), wherein at said intermediate file creation step, the acquired print data are divided so as to have the file size within certain bounds set by said bounds-to-file-size setting step (one or more EMFs are prepared for the single print job according to the total number of pages of the document prepared by the application 11) (col. 7, lines 62-67).

5. Regarding Claim 4, Mori et al disclose a medium having a print-control program, wherein at said actual-data-for-printing creation step, only one of the plurality of intermediate files is read into the memory at a time (the page separation unit 22, separates, from one another, the respective EMFs included in the single temporary file for the subject print job) (col. 9, lines 46-53).

6. Regarding Claim 5, Mori et al disclose a medium having a print-control program, wherein said actual-data-for-printing creation step comprises: creating a record list (landscape or portrait image) that makes the intermediate files correspond to a plurality of zones into which page print area is partitioned (each print sheet is divided into 2 sections: an upper section and a lower section); referring to the record list for each target zone (corresponding section); and reading the intermediate files corresponding to the target zone into the memory;

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and thereby creating actual-data-for-printing for each target zone (image located in a corresponding section) (Fig. 9) (col. 13, lines 53-67, col. 14, lines 1-29).

7. Claims 8 and 9 are rejected for the same reason as claim 1.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mori et al in view of Mitani (US 5,737,503).

10. Regarding Claim 3, Mori et al fail to teach a medium having a print-control program, wherein at said intermediate file creation step, said bounds to file size for determining the file size of the divided print data, depends on free space in the memory.

Mitani teaches a medium having a print-control program, wherein at said intermediate file creation step, said bounds to file size for determining the file size of the divided print data, depends on free space in the memory (Fig. 3) (by forming (rasterizing) the image from all intermediate data saved in the intermediate data memory (intermediate buffer) 5-3, and expanding it in the output print image memory (full raster buffer) 5-3 of one page, the intermediate

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data memory (intermediate buffer) 5-1 can be all deleted to reserve a free memory area) (col.7, lines 49-67, col. 8, lines 1-22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Mori with the teaching of Mitani to set file size depending on the free space in the memory to reserve a free memory area.

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mori et al in view of Barada et al. (US 6,330,072).

12. Regarding Claim 6, Mori et al fail to teach a medium having a print-control program, wherein said actual-data-for-printing creation step further comprises: registering an address having an instruction unit to draw included in an intermediate file, into said record list in such a manner as to make the address connected with one or a plurality of said zones for all instruction units to draw filed in the intermediate files created; referencing an address or addresses connected with each target zone from the record list; and reading the instruction unit or units to draw stored at the referenced address or addresses into the memory.

Barada et al teach a medium having a print-control program, wherein said actual-data-for-printing creation step further comprises: registering an address having an instruction unit to draw included in an intermediate file (pointer which points the address), into said record list (Display List (DL) in such a manner as to make the address connected with one or a plurality of said zones for all instruction units to draw filed in the intermediate files created (the DL consists of

a plurality of objects, or ListObjects, that are linked to one another); referencing an address or addresses connected with each target zone from the record list (each type of holds different information in the variant portion of the ListObject); and reading the instruction unit or units to draw stored at the referenced address or addresses into the memory (each ListObject is uniquely identified by a pointer which pints the address of the ListObject in the RAM) (col. 4, lines 35-59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Mori with the teaching of Barada to include a plurality ListObjects that are linked to one another into a record list to uniquely identify each ListObject by a unique pointer.

13. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mori et al in view of Nakagiri (US 6,493,099).

14. Regarding Claim 7, Mori et al fail to teach a medium having a print-control program, wherein in creating a plurality of intermediate files of divisional bitmap data at said-intermediate file creation step, the acquired print data that consists of bitmap data are divided into a plurality of parts of the bitmap data corresponding to said zones.

Nakagiri teaches a medium having a print-control program, wherein in creating a plurality of intermediate files of divisional bitmap data at said-intermediate file creation step, the acquired print data that consists of bitmap data are divided into a plurality of parts of the bitmap data corresponding to said zones (if the process has determined that the rendering processing ended, the print image stored in the band memory is fine divided if necessary, and is

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transformed into a plurality of printer-control (rendering) commands corresponding to bit-map data renderings S505. The printer-control (rendering) commands are output to the system spooler 204 S506) (col. 9, lines 64-67, and col. 10, lines 1-2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Mori with the teaching of Nakagiri to create images based on rendering commands.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satwant K. Singh whose telephone number is (703) 306-3430. The examiner can normally be reached on Monday thru Friday 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams can be reached on (703) 305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



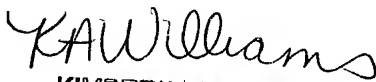
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Satwant K. Singh  
Examiner  
Art Unit 2626

sks



KIMBERLY WILLIAMS  
SUPERVISORY PATENT EXAMINER